

**A**udit

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STATUS OF IMPLEMENTATION OF THE PILOT PROGRAM ON  
SALES OF MANUFACTURED ARTICLES AND SERVICES  
OF ARMY INDUSTRIAL FACILITIES

Report Number 99-203

July 8, 1999

Office of the Inspector General

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Department of Defense

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### **Acronym**

IOC Industrial Operations Command



INSPECTOR GENERAL  
DEPARTMENT OF DEFENSE  
400 ARMY NAVY DRIVE  
ARLINGTON, VIRGINIA 22202-2884

July 8, 1999

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR ACQUISITION  
AND TECHNOLOGY  
UNDER SECRETARY OF DEFENSE (COMPTROLLER)

SUBJECT: Audit Report on Status of Implementation of the Pilot Program on Sales of  
Manufactured Articles and Services of Army Industrial Facilities  
(Report No. 99-203)

We are providing this report for review and comment. This report is the second of two reports on our audit of the Pilot Program on Sales of Manufactured Articles and Services of Army Industrial Facilities. The first report was Report No. 99-121, "Pilot Program on Sales of Manufactured Articles and Services of Army Industrial Facilities," April 2, 1999. We conducted the audit in response to section 141 of Public Law 105-85, "National Defense Authorization Act for FY 1998." We considered management comments when preparing the final report.

DoD Directive 7650.3 requires that all recommendations be resolved promptly. The Under Secretary of Defense (Comptroller) comments were not responsive. We request that the Under Secretary of Defense (Comptroller) provide additional comments on Recommendation 1. and the Under Secretary of Defense for Acquisition and Technology provide comments on Recommendation 2. by September 7, 1999.

We appreciate the courtesies extended to the audit staff. Questions on the audit should be directed to Mr. Garold E. Stephenson at (703) 604-9332 (DSN 664-9332) (gstephenson@dodig.osd.mil) or Mr. Eugene E. Kissner at (703) 604-9323 (DSN 664-9323) (ekissner@dodig.osd.mil). See Appendix D for the report distribution. The audit team members are listed inside the back cover.

A handwritten signature in cursive script that reads "David K. Steensma".

David K. Steensma  
Deputy Assistant Inspector General  
for Auditing

## Office of the Inspector General, DoD

Report No. 99-203  
(Project No 9CH-5022.01)

July 8, 1999

### Status of Implementation of the Pilot Program on Sales of Manufactured Articles and Services of Army Industrial Facilities

#### Executive Summary

**Introduction.** This is the second of two reports on our audit of the pilot program on sales of manufactured articles and services of Army industrial facilities. This report discusses the status of the Army pilot program to sell manufactured articles and services of three industrial facilities to commercial contractors providing weapon systems to DoD without determining whether the articles and services are available from United States commercial sources. The pilot program is authorized by section 141 of Public Law 105-85, "National Defense Authorization Act for FY 1998," November 18, 1997, and provides the opportunity for Rock Island Arsenal, Watervliet Arsenal, and the McAlester Army Ammunition Plant to increase their workloads by participating in contracts and teaming arrangements with United States manufacturers, assemblers, developers, and other concerns under DoD weapon system programs. The pilot program was scheduled to end in FY 1999. Section 142 of S.1059 (passed by the Senate) and Section 112 of S.1059 (passed by the House of Representatives), the proposed National Defense Authorization Act for FY 2000, would extend the pilot program through FY 2001. Rock Island Arsenal and Watervliet Arsenal have undergone \$570 million of modernization. The DoD spends about \$33 billion annually to procure major weapon systems.

**Objective.** The audit objective was to determine the effect of the waiver of 10 U.S.C. 4543(a)(5) on opportunities for United States manufacturers, assemblers, developers, or other concerns; Army industrial facilities, and small businesses to enter into or participate in contracts and teaming arrangements under DoD weapon systems programs.

**Audit Results.** The pilot program initiative has not generated significant additional work for the three participating Army industrial facilities. The pilot program has been formally active for only about 13 months (June 1998 – June 1999) because Army implementing guidance was not issued until June 1998. We previously reported this condition in Report No. 99-121, "Pilot Program on Sales of Manufactured Articles and Services of Army Industrial Facilities," April 2, 1999. Although the Army Industrial Operations Command, Rock Island Arsenal, Watervliet Arsenal, and the McAlester Army Ammunition Plant have marketed the pilot program to current and potential contractors, the three industrial facilities, to date, have received only six contracts valued at \$795,086. The viability of the pilot program is hindered and benefits from the modernization of the facilities are not being achieved because efforts by the facilities to obtain additional work are impeded by DoD guidance requiring industrial facilities to charge customers full costs, which resulted

in losing 17 contracts valued at \$8.4 million; the statutory provision that limits sales to items and services for DoD weapon systems; the statutory requirement for advance payments; and uncertainty about the future of the arsenals.

**Summary of Recommendations.** We recommend that the Under Secretary of Defense (Comptroller) waive the requirement to charge full costs contained in Volume 11B of the DoD Financial Management Regulation and amend Volume 11B to bring it in consonance with 10 U.S.C. 4543 (b)(3)(A). The cited statute authorizes industrial facilities that manufacture large caliber cannons, gun mounts, or recoil mechanisms, or components thereof, to charge their buyers, at a minimum, the variable costs associated with the articles or services provided.

We recommend that the Under Secretary of Defense for Acquisition and Technology request Congress to amend the National Defense Authorization Act for FY 1998 to permit Army industrial facilities to sell articles and services for items for other Government agencies, foreign military sales, and commercial customers without determining whether the items are available from commercial sources. We recommend that the Under Secretary request Congress to waive, for the pilot program, the requirement in 10 U.S.C. 4543(b)(2) that the industrial facilities obtain advance payment from purchasers of their articles and services. We also recommend that the Under Secretary task the Defense Science Board to identify the core manufacturing capabilities that DoD should retain at the Rock Island and Watervliet Arsenals.

**Management Comments.** The Director for Revolving Funds in the Office of the Under Secretary of Defense (Comptroller) nonconcurred with the recommendation to waive the requirement to charge full costs contained in the DoD Financial Management Regulation and amend Volume 11B to bring it in consonance with 10 U.S.C. 4543 (b)(3)(A). The Director stated that a change to the policies in the DoD Financial Management Regulation is not required because the policies comply with public law. He further stated that the rate in question must include the recovery of all actual direct costs incurred and would include direct and overhead expenses as required by 10 U.S.C. 2208. The Office of the Under Secretary of Defense for Acquisition and Technology did not respond to the draft report. A discussion of management comments is in the Finding section of the report. The complete text of the Director for Revolving Funds comments is in the Management Comments section.

**Audit Response.** The Director for Revolving Funds comments were nonresponsive. The Army industrial facilities are not required to charge their customers full costs. The DoD Federal Management Regulation policy that requires the Army industrial facilities to charge full costs is more restrictive than 10 U.S.C. 4543, which allows them the option to charge only variable costs. The Director's comment that 10 U.S.C. 2208 requires that the rate charged include direct and overhead expenses is not accurate. Paragraph (i) of 10 U.S.C. 2208 states that the provisions of 10 U.S.C. 4543 (not 10 U.S.C. 2208) apply to sales of the Army industrial facilities. We request that the Under Secretary of Defense (Comptroller) and the Under Secretary of Defense for Acquisition and Technology provide comments on the final report by September 7, 1999.

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## Background

**National Defense Authorization Act for FY 1998.** We conducted the audit in response to a tasking in Public Law 105-85, "National Defense Authorization Act for FY 1998," (the Authorization Act). Section 141 of the Authorization Act requires the Inspector General, DoD, to review the Army's pilot program to sell manufactured articles and services of Army industrial facilities to persons outside DoD without determining whether the articles and services are available from United States commercial sources as required by Title 10, United States Code (U.S.C.), section 4543(a)(5). The waiver of 10 U S C 4543(a)(5) applies to the sale of articles to be incorporated into weapon systems being procured by DoD, and services to be used in the manufacture of weapon systems for which solicitations of offers are issued during FYs 1998 and 1999. Before the waiver, the Army was allowed to sell manufactured articles or services to persons outside the DoD only when the Secretary of the Army determined that the articles and services were not available from commercial sources located in the United States. The pilot program was scheduled to end in FY 1999. Section 142 of S 1059 (as passed by the Senate) and Section 112 of S 1059 (as passed by the House of Representatives), the proposed National Defense Authorization Act for FY 2000, would extend the pilot program through FY 2001.

**Congressional Concerns.** The Senate Committee on Armed Services expressed concern in Report No. 105-29 accompanying the FY 1998 Authorization Act, that with the end of the Cold War and the beginning of reduced defense budgets, DoD military industrial facilities were operating inefficiently because work was not available. The Committee believed these facilities should be allowed to provide commercial contractors with articles and services for inclusion in weapon systems that would ultimately be procured by the DoD. The Committee believed that using this excess capacity would reduce facility operating costs, provide private industry with quality service, and maintain a critical work force. Therefore, the committee recommended a provision that would authorize Army industrial facilities to sell articles and services to commercial entities that would ultimately be incorporated into weapon systems procured by DoD. According to Army officials, in December 1998, 76 percent of Rock Island Arsenal industrial capacity and 83 percent of Watervliet Arsenal industrial capacity were unused, compared to less than 20 percent of unused capacity in 1988. The unused industrial capacity at McAlester Army Ammunition Plant was 86 percent at the end of 1998.

## Three Army Industrial Facilities Participating In The Pilot Program

**McAlester Army Ammunition Plant, Oklahoma.** The McAlester Army Ammunition Plant, which began manufacturing operations in 1943 as a Naval Ammunition Depot, is the premier DoD facility for loading, assembling, and

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packing high explosive and inert aerial bombs. Its other missions include maintenance and renovation of bombs, rockets, projectiles and propelling charges, and conventional ammunition demilitarization. The installation covers 72 square miles (45,000 acres) in southeastern Oklahoma and has six manufacturing facilities and more than 2,200 earth-covered ammunition storage magazines and 162 inert storage warehouses. The plant is capable of manufacturing any type of ammunition in its six manufacturing facilities, each with multiple lines and tooling. The storage capacity is used for war reserve stocks of ammunition. The U.S. Army Defense Ammunition Center, which performs munitions training, logistics engineering, explosive safety, demilitarization research and development, and career management functions, is collocated with the Ammunition Plant

**Rock Island Arsenal, Illinois.** Rock Island Arsenal, which is located on the Mississippi River near Rock Island and Moline, Illinois, and Davenport and Bettendorf, Iowa, began manufacturing operations in 1862. The Arsenal manufactures weapon components such as artillery gun mounts, recoil mechanisms, and aircraft weapon sub-systems. A \$220 million modernization project completed in the late 1980s greatly enhanced the Arsenal's physical plant and machine tool inventory. Every phase of manufacturing is available from prototype development to production of major items, spare parts, and repair items. Capabilities include engineering (manufacturing, producibility, chemical, metallurgical), testing including live fire simulation; foundry; forging machining; finishing; soft materials fabrication; tool, die, and gauge manufacturing; spare and repair parts production, and prototype fabrication. Recent products include the M198 155mm Towed Howitzer, the M119 Towed Howitzer, and the gun mount for the M1A1 Abrams tank. Collocated with the Arsenal is the Headquarters, U.S. Army Industrial Operations Command, which is responsible for managing Army depots, arsenals, and ammunition plants worldwide.

**Watervliet Arsenal, New York.** Watervliet Arsenal, which is located on the Hudson River, northeast of Albany, New York, began manufacturing operations in 1813 and is the nation's oldest, continuously-active arsenal. The Arsenal is a world-class facility for production of large bore gun barrels and breech mechanisms for artillery, armor, and shipboard weapon systems, as well as ship propeller shafts and other large, cylindrical, shaft items. Collocated with the Arsenal is the U.S. Army Benet Laboratory, whose mission includes the research and development of military ordnance items and manufacturing technologies. A \$350 million modernization project completed in 1992 more than doubled the production capability of the Arsenal. It is equipped with a variety of modern computer-numerical-control machining centers, mills, profilers, and lathes. Capabilities include precision machining, precision tool and die making, metal fabrication, welding, specialized machining, forging, heat treatment, electroplating/surfacing coating, painting, and packaging, as well as precision inspection and testing of a variety of parts and assembly configurations. Recently, the Arsenal installed a demonstration system to recycle highly toxic chemicals used to clean and prepare military gun components for chrome plating.

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## Guidance Addressing Sales of Articles and Services Outside DoD

**Pilot Program Requirement.** Section 141 of the Authorization Act requires the Army to carry out a pilot program to test the efficacy and appropriateness of selling manufactured articles and services of Army industrial facilities under 10 U.S.C. 4543 without regard to the availability of the articles and services from United States commercial sources. In carrying out the pilot program, the Authorization Act permits the Secretary of the Army to sell articles manufactured at, and services provided by, not more than three Army industrial facilities.

**Temporary Waiver of Requirement to Determine Availability from Domestic Source.** The Authorization Act waives the requirement in 10 U.S.C. 4543(a)(5) for the Army to determine whether an article or service is available from a commercial source located in the United States for the following sales for which a solicitation of offers is issued during FYs 1998 and 1999:

- a sale of articles to be incorporated into a weapon system being procured by DoD, and
- a sale of services to be used in the manufacture of a weapon system being procured by DoD.

**Pilot Program Review Requirement.** The Authorization Act requires the Inspector General, DoD, to review the pilot program and report the results of the review to Congress by July 1, 1999. The report should assess the extent to which the temporary waiver of 10 U.S.C. 4543(a)(5):

- enhances the opportunity for United States manufacturers, assemblers, developers, and other concerns to enter into or participate in contracts and teaming arrangements with Army industrial facilities under DoD weapon system programs,
- enhances the opportunity for Army industrial facilities to enter into or participate in contracts and teaming arrangements with United States manufacturers, assemblers, developers, and other concerns under DoD weapon system programs, or
- affects the ability of small businesses to compete for the sale of manufactured articles or services in the United States in competition to enter into or participate in contracts and teaming arrangements under DoD weapon system programs.

The report may also include examples and recommendations that the Inspector General considers appropriate regarding continuation or modification of the policy as set forth in 10 U.S.C. 4543(a)(5).

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## Objective

The audit objective was to determine the effect of the waiver of 10 U.S.C. 4543(a)(5) on opportunities for United States manufacturers, assemblers, developers, or other concerns; Army industrial facilities; and small businesses to enter into or participate in contracts and teaming arrangements under DoD weapon system programs. See Appendix A for a discussion of the audit scope and methodology

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## Pilot Program Implementation

The pilot program has not generated significant additional work for the three participating Army industrial facilities during the 13 months since the Army implementing guidance was issued in June 1998. We addressed the timeliness of Army implementation in Report No 99-121, "Pilot Program on Sales of Manufactured Articles and Services of Army Industrial Facilities," April 2, 1999. Marketing of the pilot program by the three industrial facilities to current and potential contractors has resulted in only 6 contracts valued at \$795,086 (see Appendix B). Factors such as: DoD guidance requiring industrial facilities to charge customers full costs, which resulted in losing 17 contracts valued at \$8.4 million, the statutory provision that limit sales to items and services for DoD weapon systems; the statutory requirement for advance payments; and uncertainty about the future operation of the arsenals are impeding efforts by the facilities to obtain additional work and hinder the DoD from fully benefiting from modernization expenditures at the Arsenals.

## Other Impediments

**Requirement to Charge Customers Full Costs.** Guidance requiring Army industrial facilities to include full costs in their proposed prices has placed the industrial facilities at a disadvantage when competing with commercial sources that include only costs attributable to the article or services to be provided in their proposed prices. Of the 18 offers by Rock Island Arsenal under the pilot program, 17 were rejected because prices were too high. Rock Island Arsenal officials stated that the prices were too high because they include full costs rather than specific costs related to producing the item or service. The total amount of the 17 rejected offers was \$8,433,791. The one offer that resulted in a contract was valued at \$38,885. Officials at Watervliet Arsenal and the McAlester Army Ammunition Plant also stated that the requirement to include full costs in prices makes it difficult for them to compete with the private sector. Factors driving industrial facility costs upward include unused plant capacity maintained to provide surge capability and headquarters-directed surcharges. For example, in FY 1998, the three industrial facilities budgeted \$41,392,200 for unused plant capacity but were allocated only \$16,209,900. The \$25,182,300 difference was included in prices offered by the industrial facilities to both Government and private sector customers.

Army Guidance issued in 1994 requires industrial facilities to follow DoD Regulation 7000.14R, "Financial Management Regulation," when making sales under 10 U.S.C. 4543. Volume 11B, DoD 7000.14R, "Reimbursable Operations, Policy and Procedures – Defense Business Operations Fund," requires that, in the case of a sale of commercial articles or commercial services, an industrial facility that manufactures large caliber cannons, gun mounts, or recoil mechanisms, or components thereof, charge the buyer the full costs (fixed and variable) that are associated with the articles or services sold.

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The requirement to charge full costs is more restrictive than 10 U.S.C. 4543(b)(3)(A), which authorizes the industrial facilities

"(A) to charge the buyer, at a minimum, the variable costs that are associated with the commercial articles or services; ."

The intent of 10 U.S.C. 4543 is to provide industrial facilities relief from regulations that require that the price offered to a potential customer include costs that are unrelated to the actual manufacture of the product or the service required by that customer. Industrial facilities should be allowed to charge only the variable costs associated with the articles or services provided. To help make this pilot program viable, we believe that the Under Secretary of Defense (Comptroller) should waive the full cost requirement in Volume 11B of the DoD Financial Management Regulation. The DoD has invested about \$570 million to modernize these facilities. Unlike private industry, these facilities must maintain capacity for mobilization and surge requirements and are not allowed to sell off unused capacity. We believe the DoD would benefit from its large investment to modernize the facilities by providing the flexibility authorized in statute to charge only variable costs.

**Pilot Program Legislation Requiring Sales for DoD Weapon Systems.**

Section 141 of the National Defense Authorization Act for FY 1998, requires that the articles and services provided under the pilot program be sold to prime contractors for incorporation into weapon systems being procured by DoD. The requirement that the articles and services be incorporated in DoD weapon systems prevents the industrial facilities from selling articles and services to contractors for incorporation into items being procured by other Government agencies, friendly foreign governments making purchases through the Foreign Military Sales Program, and commercial customers unless a determination is made that the articles or services are not available from United States commercial services. To broaden sales opportunities under the pilot program and utilize its large modernization investment, the Under Secretary of Defense for Acquisition and Technology should request Congress to amend section 141 of the National Defense Authorization Act for FY 1998 to permit the Army industrial facilities to sell articles and services for incorporation into items for other Government agencies, foreign military sales, and commercial customers without determining whether the items are available from commercial sources.

**Requirement for Advance Payments.** Sales under 10 U.S.C. 4543 require that the Army working-capital funded industrial facilities obtain payment in advance of performance. DoD has implemented the requirement in chapter 64 of Volume 11B, DoD 7000 14R, "Reimbursable Operations, Policy and Procedures - Defense Business Operations Fund." The advance payment may be in full or by incremental payments. Officials at Rock Island Arsenal, Watervliet Arsenal, and the McAlester Army Ammunition Plant stated that the requirement to obtain advance payment is a barrier to obtaining work under the pilot program because contractors generally are not willing to pay for articles and service in advance of receipt. The common business practice in private industry is to pay for articles and services after acceptance -- often 60 to 90 days after acceptance. To allow the three industrial facilities participating in the pilot program to use private industry billing practices, the Under Secretary of Defense for Acquisition and Technology

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should request Congress to waive, for the pilot program, the requirement in 10 U S C. 4543(b)(2) that the industrial facilities obtain advance payment from purchasers of their articles and services.

**Uncertainty About the Future of Army Arsenals.** Officials at Rock Island and Watervliet Arsenals expressed concern that the Office of Management and Budget Circular A-76 cost studies announced in August 1998 to determine whether operation of the arsenals should be contracted out or retained in-house and rumors circulating that the Army wants to close the Arsenals are creating uncertainty in the minds of potential customers desiring to establish long-term supplier relationships. The officials believe that potential customers are not awarding contracts to the arsenals because the customers are not certain that the high quality of work by the arsenals will continue after operations are contracted out, or that the arsenals will remain open. To prevent additional rumors about the future of the arsenals that could keep potential customers from awarding work to the arsenals, the Under Secretary of Defense for Acquisition and Technology should direct the Defense Science Board\* to identify the core manufacturing capabilities that DoD should retain at the Rock Island and Watervliet Arsenals.

## Evaluation of the Army Pilot Program

In Report No. 99-121, we stated that the Army industrial facilities have not had sufficient experience under the pilot program to fairly assess the program's impact and recommended that the Under Secretary of Defense for Acquisition and Technology initiate action to request that Congress extend the pilot program. The Acting Deputy Under Secretary of Defense (Industrial Affairs) nonconcurred, stating that the limited pilot program experience coupled with the partnering and teaming experience under direct sales contracts and shared work at 13 Government-owned, Government-operated Army industrial facilities should be sufficient for the Inspector General, DoD, to address the issues posed by the Congress. We do not agree that direct sales work and shared work at 13 industrial facilities can be coupled with pilot program work to address the issues posed by Congress in Section 141 of the Authorization Act. Section 141 requires that the Army use articles manufactured at, and services provided by, not more than three Army industrial facilities for the pilot program. Section 141 further requires that the Inspector General, DoD, review the experience under the pilot program. Inclusion of direct sales work and shared work at 13 industrial facilities in a review of the pilot program is clearly in conflict with the requirements of Section 141 of the Authorization Act, and would render any assessment of the pilot program invalid.

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\* The Defense Science Board is an independent, standing advisory committee of outstanding basic and applied scientists from industry and Government, selected on the basis of their preeminence in the fields of science, technology, and its application to military operations, research, engineering, and manufacturing and acquisition processes. The Board reports directly to the Secretary of Defense through the Under Secretary of Defense for Acquisition and Technology

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In his comments on Report No. 99-121, the Acting Deputy Under Secretary also suggested that we address several issues/questions on the use of the Army industrial facilities in our analysis of the pilot program. The issues/questions and audit responses are shown in Appendix C.

## Conclusion

The pilot program has the potential to produce needed monetary benefits for modernization and readiness programs through increased competition and through the use of idle plant capacity at Army industrial facilities. However, to date, the pilot program has not generated significant additional work for the three participating Army industrial facilities. Significant work was not generated primarily because the Army took almost 7 months to implement the pilot program, and program publicity may not have reached the appropriate target audience. Additionally, DoD guidance, Army guidance, 10 U.S.C. 4543, and the pilot program statute contain provisions that may be impeding efforts by the industrial facilities to obtain additional work. Consequently, the Army industrial facilities have not gained sufficient experience under the pilot program to allow the fair assessment of the program's impact on opportunities for Army industrial facilities, commercial contractors, and small businesses to enter into or participate in contracts or teaming arrangements under DoD weapon system programs as required by Section 141 of the Authorization Act.

## Recommendations, Management Comments, and Audit Response

**1. We recommend that the Under Secretary of Defense (Comptroller):**

**a. Waive the requirement to charge full costs contained in Volume 11B of the DoD Financial Management Regulation and allow the industrial facilities to charge variable costs for articles or services provided until Volume 11B can be amended.**

**b. Amend Volume 11B of the DoD Financial Management Regulation to bring it in consonance with 10 U.S.C. 4543 (b)(3)(A), which authorizes industrial facilities that manufacture large caliber cannons, gun mounts, or recoil mechanisms, or components thereof, to charge their buyers, at a minimum, the variable costs associated with the articles or services provided.**

**Under Secretary of Defense (Comptroller) Comments.** The Director for Revolving Funds, Office of the Under Secretary of Defense (Comptroller) nonconcurred, stating that a change to the policies in the DoD Financial Management Regulation is not warranted at this time because the policies comply with public law. The Director stated that setting rates to recover the full cost of operations is a principle of revolving fund operations. Paragraph (b)(3) of 10 U.S.C. 4543 states that the minimum amount the facility is allowed to charge is

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the variable costs of the work performed. Variable costs are those costs that are expected to fluctuate directly with the volume of sales and volume of production necessary to satisfy the sales order. The Director stated that the rate in question must include the recovery of all actual direct costs incurred and would include direct and overhead expenses as required by Title 10 U S C 2208, "Working-Capital Funds " Performing work for the private sector that does not recover costs would be unfairly underselling private competitors and amount to a subsidy for the private company benefiting from the reduced price, further impacting competition and the private sector. The Director further stated that the Defense Working Capital Fund (DWCF) Corporate Board is reviewing various recommendations from the DWCF Reform Task Force related to rates. The DoD Financial Management Regulation will be modified to reflect approved changes to revolving fund rate setting guidance once the DWCF Corporate Board reaches a decision. Such a decision would be compatible with the audit report recommendation.

**Audit Response.** The Director for Revolving Funds comments were not responsive. The Army industrial facilities are not required to charge their customers full costs. The DoD Financial Management Regulation can be modified to permit only variable cost charges to facilitate the pilot program. The DoD Financial Management Regulation policy that requires the Army industrial facilities to charge full costs is more restrictive than 10 U.S.C. 4543, which allows them the option to charge only variable costs. Additionally, the Director's statement that 10 U.S.C. 2208 requires that the rate charged include direct and overhead expenses is not accurate. Paragraph (i) of 10 U.S.C. 2208 states that the provisions of 10 U.S.C. 4543 (not 10 U.S.C. 2208) apply to sales of the Army industrial facilities. Similarly, paragraph (a)(2)(B) of 10 U.S.C. 2553, "Articles and Services of Industrial Facilities: Sale to Persons Outside the Department of Defense," states that 10 U.S.C. 4543 governs the sales of the Army industrial facilities and 10 U.S.C. 2553 does not apply. Provisions in 10 U.S.C. 2553 require that industrial facilities include in their prices costs that are not required by 10 U.S.C. 4543. The fact that the Army industrial facilities have been specifically excluded from 10 U.S.C. 2208 and 2553 and made the subject of a separate statute (10 U.S.C. 4543) with less restrictive cost provisions, makes it clear that the Army industrial facilities can be treated differently from other industrial facilities. The intent of 10 U.S.C. 4543 is to provide the Army industrial facilities relief from statutes and regulations that require that the prices offered to potential customers include costs that are unrelated to the actual manufacture of the products or services required by their customers. We understand that the DWCF Corporate Board is reviewing recommendations related to rates that may result in recommended changes to the DoD Financial Management Regulation that are compatible with the recommendations in this report. However, the need to bring the regulation in consonance with the provision for charging only variable costs as permitted by 10 U.S.C. 4543 precludes waiting for the DWCF Corporate Board to complete its work. It is unfortunate this statute for the pilot program has been in effect for 21 months and this issue has not been addressed by the DWCF Corporate Board and the Under Secretary of Defense (Comptroller). Without such a change, the arsenals will not be competitive due to the considerable overhead charges that reflect property and equipment that is essentially mothballed. This is a situation that is unlike the private sector, which can sell off excess or unneeded assets. The Director's assertion that variable costs would unfairly undersell private competitors is unsupported because private industry does

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not have to consider mobilization and surge requirements. Moreover, the Government has invested at least half a billion dollars to make these world class facilities and is getting little return or use of these assets. Without these changes, the pilot program does not appear to have a viable chance of succeeding and the DoD investment in these facilities will be wasted. Variable costs should be charged to see if the industrial facilities are even viable at that level. The impact on private industry can be determined in later audits. We request that the Under Secretary of Defense (Comptroller) reconsider the recommendation and provide additional comments on the recommendation in response to the final report

**2. We recommend that the Under Secretary of Defense for Acquisition and Technology:**

**a. Request Congress to:**

**(1) Amend section 141 of the National Defense Authorization Act for FY 1998 to permit the Army industrial facilities to sell articles and services for incorporation into items for other Government agencies, Foreign Military Sales, and commercial customers without determining whether the items are available from commercial sources.**

**(2) Waive, for the pilot program, the requirement in 10 U.S.C. 4543(b)(2) that the industrial facilities obtain advance payment from purchasers of their articles and services.**

**b. Task the Defense Science Board to identify the core manufacturing capabilities that DoD should retain at the Rock Island and Watervliet Arsenals.**

**Under Secretary of Defense for Acquisition and Technology Comments.** The Under Secretary did not provide comments

**Audit Response.** We request that the Under Secretary of Defense for Acquisition and Technology provide comments in response to the final report.

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## Appendix A. Audit Process

### Scope and Methodology

We audited Army implementation of the pilot program authorized by section 141 of the National Defense Authorization Act for FY 1998. The Authorization Act authorizes the Army to sell during FYs 1998 and 1999 manufactured articles and services of up to three Army industrial facilities to persons outside DoD without determining whether the articles and services are available from the United States commercial sources as required by 10 U.S.C. 4543(a)(5). To determine the effect of the pilot program on opportunities for United States manufacturers, assemblers, developers, or other concerns; Army industrial facilities; and small businesses to enter into or participate in contracts and teaming arrangements under DoD weapon system programs, we

- examined Army guidance on the pilot program;
- reviewed information on the six contracts awarded under the pilot program to Rock Island Arsenal, Watervliet Arsenal, and the McAlester Army Ammunition Plant;
- discussed pilot program implementation with officials at the Office of the Assistant Secretary of the Army for Acquisition, Logistics, and Technology, the Army Materiel Command; the Army Industrial Operations Command, Rock Island Arsenal; Watervliet Arsenal, and the McAlester Army Ammunition Plant,
- reviewed the Army's experience and results under the pilot program and discussed the results with officials at the Army Materiel Command, the Army IOC, Rock Island Arsenal, Watervliet Arsenal, and the McAlester Army Ammunition Plant; and
- discussed munitions industry concerns of the Army pilot program with officials from the Munitions Industrial Base Task Force. The Munitions Industrial Base Task Force is a nonprofit organization whose membership includes 15 companies in the munitions business that have a common goal of pursuing adequate funding and policies to sustain a responsive, capable, United States munitions industrial base.

**DoD-wide Corporate Level Government Performance and Results Act Goals.**  
In response to the Government Performance Results Act, the Department of Defense has established 6 DoD-wide corporate level performance

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objectives and 14 goals for meeting these objectives. This report pertains to achievement of the following objective and goal

**Objective:** Fundamentally reengineer DoD and achieve a 21<sup>st</sup> century infrastructure. **Goal:** Reduce costs while maintaining required military capabilities across all DoD mission areas. (DoD-6)

**Use of Computer-Processed Data.** We did not use computer-processed data to perform this audit.

**Audit Type, Dates, and Standards.** We performed this program audit from November 1998 through June 1999 in accordance with auditing standards issued by the Comptroller General of the United States, as implemented by the Inspector General, DoD.

**Contacts During the Audit.** We visited or contacted individuals and organizations within the DoD, and selected contractor organizations. Further details are available upon request

## Summary of Prior Coverage

During the past 5 years, the General Accounting Office issued one audit report and the Inspector General, DoD, issued one audit report that discussed Army industrial facilities.

### General Accounting Office

General Accounting Office, Report No. GAO/NSIAD-99-31 (OSD Case No. 1674), "Army Industrial Facilities. Workforce Requirements and Related Issues Affecting Depots and Arsenals," November 1998.

### Inspector General, DoD

Inspector General, DoD, Report No. 99-121, "Pilot Program on Sales of Manufactured Articles and Services of Army Industrial Facilities," April 2, 1999.

## Appendix B. Summary of Contracts Obtained Under the Pilot Program

<u>Contracts</u>	<u>Value</u>
<b><u>McAlester Army Ammunition Plant</u></b>	
(1) Load, assembly, and pack MK 82, Joint Defense Attack Munitions Prime Contractor Boeing Aircraft Company Customer Navy	\$ 35,704
(2) All up round integration of the Extended Range Guided Munitions Prime Contractor. Raytheon Systems Company Customer Navy	135,904
(3) Demilitarization of 105-mm HEAT Tank Ammo Projectiles Prime Contractor. Primex Technologies Customer Army	64,490
(4) Navy Harpoon System Prime Contractor: McDonnell-Douglas Customer: Navy	504,825
<b>Subtotal</b>	<b>\$740,923</b>
<b><u>Rock Island Arsenal</u></b>	
(1) Machine Top Ring Assembly for the Armored Combat Earthmover Prime Contractor: LOC Performance Products Customer Army	38,885
<b><u>Watervliet Arsenal</u></b>	
(1) Machining and inspection of internal thread for Launch Assembly Prime Contractor B&B Devices Customer: Defense Logistics Agency	<u>15,278</u>
<b>Total</b>	<b>\$795,086</b>

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## Appendix C. Issues/Questions of the Acting Deputy Under Secretary of Defense (Industrial Affairs) and Audit Response

The audit responses to the issues/questions raised by the Acting Deputy Under Secretary are based on discussions with Army officials and audit observations of the Army's limited experience under the pilot program

**Issue/Question.** Has the corporate Army formally determined that it must retain all of its organic industrial facilities? Should some/all be closed or downsized?

**Audit Response.** The Army has not determined whether it should retain all or some of its industrial facilities nor has it identified the capabilities it needs to retain, if any, to meet national security requirements. The Army is in the process of performing Office of Management and Budget Circular A-76 cost studies of Rock Island and Watervliet arsenals to determine whether contractor or Government personnel should perform arsenal operations. One of the products of an A-76 study is identification of the most efficient Government organization, which usually includes personnel reductions. Additionally, because of shrinking Defense budgets, decreased demand for military hardware, and increased reliance on private sector contractors, the industrial facilities have been reducing workforce and laying away equipment and floor space to reduce costs. Since 1989, Watervliet Arsenal has reduced its workforce by 1,074 personnel, excessed 1,602 machines, and laid away 200,000 square feet of floor space to reduce cost. Similarly, Rock Island Arsenal has reduced the number of its employees by 1,091, excessed 904 machines, and laid away 388,000 square feet of floor space to reduce costs.

**Issue/Question.** Are the facilities and relevant industrial capabilities that are proposed for the pilot program among those that the Army needs to retain?

**Audit Response.** The Army has not identified the industrial capabilities it needs to retain. We are recommending in this report that the Under Secretary of Defense for Acquisition and Technology task the Defense Science Board to identify the core manufacturing capabilities that DoD should retain at the Rock Island and Watervliet Arsenals

**Issue/Question.** When organic industrial facilities bid for work, do their bids reflect all relevant costs? (Is the competition between public and private enterprises fair?)

**Audit Response.** Army guidance requires that the industrial facilities include fully burdened rates when preparing their bids. The fully burdened rates included costs that are not relevant to the articles or services required by the potential customer. For example, fully burdened rates include the unfunded costs to maintain unused capacity retained for a surge capability and unrelated surcharges directed by higher headquarters. Determining whether a competition between a public industrial facility and a private enterprise is fair is

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like comparing apples to oranges because they do business differently. For example, if a private enterprise has unused capacity, it may bid only its direct cost, forgoing overhead and profit, to obtain the work and keep its assets (people, equipment, and facilities) employed, or it may immediately shed its unused capacity. The public industrial facility is required to bid fully burdened rates and it cannot quickly, or without authorization, dispose of unused capacity. Additionally, a private enterprise has the opportunity to keep its assets fully employed by competing worldwide for work, while the public industrial facility is limited to competing for work among a limited number of customers authorized by statute.

**Issue/Question.** To what extent will this pilot program influence DoD/Army decisions associated with reducing excess organic infrastructure?

**Audit Response.** The pilot program should have no influence on decisions associated with reducing excess organic infrastructure. The Army and DoD should identify the organic infrastructure needed to support current and projected national security requirements, ensure that the identified infrastructure is fully workloaded, and dispose of excess infrastructure. Work obtained under the pilot program should help lower the cost of ownership until the Army and DoD identify the organic infrastructure required for national security requirements.

**Issue/Question.** To what extent do successful organic industrial facility bids negatively impact the viability of privately owned competitors?

**Audit Response.** Under the pilot program, there has been no apparent negative impact on the viability of the privately owned businesses interested in the work awarded to the Army industrial facilities. Three commercial contractors expressed an interest in the contract awarded to Watervliet Arsenal. The prime contractor did not accept the commercial contractor offers because the prices were too high or the contractors could not meet delivery requirements. As of June 8, 1999, the commercial contractors were still in business. Three other commercial contractors expressed an interest in two of the four contracts awarded to McAlester Army Ammunition Plant. The commercial contractors either did not have adequate facilities to perform the work or were unable to meet the prime contractors' required delivery schedule. As of June 8, 1999, the three commercial contractors were still in business. No commercial contractor had adequate facilities to do the work required for the third contract, but three Army Depots and McAlester Army Ammunition Plant had the necessary facilities. The prime contractor awarded the contract to McAlester based on proposed delivery schedule and location. On the fourth contract, the prime contractor certified that the material being purchased was not commercially available in the time required.

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## **Appendix D. Report Distribution**

### **Office of the Secretary of Defense**

Under Secretary of Defense for Acquisition and Technology  
Deputy Under Secretary of Defense (Industrial Affairs and Installations)  
Deputy Under Secretary of Defense (Logistics)  
Director, Defense Logistics Studies Information Exchange  
Under Secretary of Defense (Comptroller)  
Deputy Chief Financial Officer  
Deputy Comptroller (Program/Budget)  
Assistant Secretary of Defense (Legislative Affairs)

### **Department of the Army**

Assistant Secretary of the Army for Acquisition, Logistics, and Technology  
Commander, Army Materiel Command  
Commander, U.S. Army Industrial Operations Command  
Commander, McAlester Army Ammunition Plant  
Commander, Rock Island Arsenal  
Commander, Watervliet Arsenal  
Auditor General, Department of the Army

### **Department of the Navy**

Auditor General, Department of the Navy

### **Department of the Air Force**

Auditor General, Department of the Air Force

### **Other Defense Organizations**

Director, Defense Contract Audit Agency  
Director, Defense Finance and Accounting Service  
Director, Defense Logistics Agency  
Director, Defense Security Assistance Agency  
Director, National Security Agency  
Inspector General, National Security Agency  
Inspector General, Defense Intelligence Agency

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## **Non-Defense Federal Organizations**

Office of Management and Budget  
General Accounting Office  
National Security and International Affairs Division  
Technical Information Center

## **Congressional Committees and Subcommittees, Chairman and Ranking Minority Member**

Senate Committee on Appropriations  
Senate Subcommittee on Defense, Committee on Appropriations  
Senate Committee on Armed Services  
Senate Committee on Governmental Affairs  
House Committee on Appropriations  
House Subcommittee on Defense, Committee on Appropriations  
House Committee on Armed Services  
House Committee on Government Reform  
House Subcommittee on Government Management, Information, and Technology,  
Committee on Government Reform  
House Subcommittee on National Security, International Affairs, and Criminal Justice,  
Committee on Government Reform



# Under Secretary of Defense (Comptroller) Comments



COMPTROLLER  
(Program/Budget)

OFFICE OF THE UNDER SECRETARY OF DEFENSE  
1100 DEFENSE PENTAGON  
WASHINGTON, DC 20301-1100

JUN 24 1999


MEMORANDUM FOR INSPECTOR GENERAL, DEPARTMENT OF DEFENSE

SUBJECT: Draft Audit Report on Status of Implementation of the Pilot Program on Sales of  
Manufactured Articles and Services of Army Industrial Facilities  
(Project No. 9CH-5022.01)

The draft audit report made recommendations to the Under Secretary of Defense  
(Comptroller) concerning provisions in the DoD Financial Management Regulations Volume

11B. We have reviewed the audit and have provided our comments as enclosure (1).

My point of contact on this audit is Mr. Ralph Proctor. He may be reached at 697-1880.

  
William C. Coonce  
Director for Revolving Funds

Office of the Secretary of Defense (Comptroller) Comments on  
Draft Audit Report on Status of Implementation of the Pilot Program on Sales of Manufactured  
Articles and Services of Army Industrial Facilities  
(Project No. 9CH-5022.01)

Recommendations:

1. We recommend that the Under Secretary of Defense (Comptroller):

a. Waive the requirement to charge full costs contained in Volume 11B of DoD Financial Management Regulation and allow industrial facilities to charge variable costs for articles and services provided until Volume 11B can be amended.

b. Initiate action to amend Volume 11B of the DoD Financial Management Regulation to bring it in consonance with 10 USC 4543(b)(3)(A), which authorizes industrial facilities that manufacture large caliber cannons, gun mounts, or recoil mechanisms, or components thereof, to charge their buyers, at a minimum, the variable costs associated with the articles or services provided.

Office of the Under Secretary of Defense (Comptroller) Comments: Do not concur.

A basic principle of revolving fund operations is that rates are set to recover the full cost of operations. The audit implies that current DoD policy does not agree with the legal specifications in Title 10 USC 4543 Paragraph (b)(3)(A) of USC 4543 states:

“ In the case of the sale of commercial articles by a facility that manufactures large caliber cannons, gun mounts, or recoil mechanisms, or components thereof, authorize such facility --

(A) to charge the buyer, at a minimum, the variable costs that are associated with the commercial article or commercial services sold.”

Paragraph b(3) states that the minimum amount the facility is allowed to charge is the variable cost of the work performed. Variable costs are those costs that are expected to fluctuate directly with the volume of sales and in the case of articles, the volume of production necessary to satisfy the sales order. To the extent that an order from the private sector would increase workload enough to significantly reduce rates to all customers, the lower rate could be charged. However, the rate in question must include the recovery of all actual direct costs incurred and would include direct and overhead expenses as required by Title 10 USC 2208.

If the Arsenal were permitted to charge less than full cost recovery on private sector work, then the government customers would need to pay a higher rate to make up the shortfall.

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In addition, offering to perform work to the private sector at rates that do not recover costs would let us unfairly undersell private competitors, which is contrary to numerous DoD policies. Furthermore, such a practice would amount to a subsidy for the private company benefiting from the reduced price, further impacting competition and the private sector. This type of subsidy would be an expenditure of resources for which we have no authority

Since the policies in the FMR do not contradict, but comply with public law, a change in guidance is not warranted at this time. However, the Defense Working Capital Fund (DWCF) Corporate Board is reviewing various recommendations from the DWCF Reform Task Force related to rates, which incorporate the concept of incremental rates after full cost recovery of fixed costs. Once the Corporate Board reaches a decision, the FMR will be modified to reflect approved changes to revolving fund rate setting guidance. Such a decision would be compatible with the audit report recommendations.

## **Audit Team Members**

The Contract Management Directorate, Office of the Assistant Inspector General for Auditing, DoD, produced this report.

Paul J. Granetto  
Garold E. Stephenson  
Eugene E. Kissner  
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## INTERNET DOCUMENT INFORMATION FORM

**A . Report Title: Status of Implementation of the Pilot Program on Sales of Manufactured Articles and Services of Army Industrial Facilities**

**B. DATE Report Downloaded From the Internet: 08/05/99**

**C. Report's Point of Contact: (Name, Organization, Address, Office Symbol, & Ph #):** OAIG-AUD (ATTN: AFTS Audit Suggestions)  
Inspector General, Department of Defense  
400 Army Navy Drive (Room 801)  
Arlington, VA 22202-2884

**D. Currently Applicable Classification Level: Unclassified**

**E. Distribution Statement A: Approved for Public Release**

**F. The foregoing information was compiled and provided by:**  
DTIC-OCA, Initials: \_\_VM\_\_ Preparation Date 08/05/99

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